CLAIMS

1.   A remote station apparatus comprising:

2   a quality measurement unit for iteratively measuring link quality of a
        communication link; and

4   a differential analyzer for determining changes in the measured link
        quality.

2.   The remote station of claim 1, wherein the link quality is measured as

2   carrier to interference of a received signal.

3.   The remote station of claim 2, wherein the quality measurement unit

2   generates a quality metric, and wherein the remote station applies a sector
    cover to the quality metric.

4.   In a wireless communication system, a method comprising:

2   generating quality messages at a first frequency, the quality
        message providing information on the quality of a

4   communication link; and

        generating differential indicators at a second frequency, the

6   differential indicators indicating changes in the quality of the
        communication link, wherein the second frequency is greater

8   than the first frequency.

5.   The method of claim 4, wherein each quality message includes carrier to

2   interference information of a received signal at a receiver

6.   The method of claim 5, wherein the received signal is a pilot signal.

7.   The method of claim 4, wherein each differential indicator is at least one

2   bit.

8.   The method of claim 4, wherein generating differential indicators further
2   comprises:

comparing a current link quality measurement to a projected link
4   quality measurement;

decrementing the differential indicator when the current link quality
6   measurement is less than the projected link quality
            measurement;

incrementing the differential indicator when the current link quality
            measurement is greater than or equal to the projected link
8
10   quality measurement; and

transmitting the differential indicator.

9.   In a wireless communication system for processing voice
2   communications and packet-switched communications, a base station
comprising:

4   receive circuitry operative to receive signals on a reverse link,
            including a quality message and differential indicators, the
6   quality message periodically providing a quality metric of a
            forward link, wherein the differential indicators track the quality
8   metric between successive quality messages;

a memory storage unit operative to store a quality message
10   received on the reverse link; and

a differential analyzer to update the quality message stored in the
12   memory storage unit in response to the differential indicators.

10.   The base station of claim 9, further comprising:
2   a scheduler unit operative to schedule packet-switched
            communications in the system in response to the quality
4   message stored in the memory storage unit.

11. The base station of claim 10, wherein the quality metric is a data rate
2 control message.

12. The base station of claim 11, wherein:
2   each data rate control message corresponds to an entry in a data
                rate control table; and
4   each differential indicator points to a neighboring entry in the data
                rate control table.

13. In a wireless communication system for processing voice
2 communications and packet-switched communications, a transceiver
comprising:
4   a data rate control table listing data rate control messages and
                associated transmission information;
6   a data rate calculation unit coupled to the data rate control table, the
                data rate calculation unit operative to select a data rate control
8   message in response to a received signal at the transceiver;
                and
10   a differential analyzer coupled to the data rate calculation unit
                operative to generate differential indicators pointing to a next
12   entry in the data rate control table.